

CLAIMS

1. Method for inerting the anodes of fuel cells, especially high-temperature fuel cells, characterized by the fact that water vapor is supplied to the anodes of the fuel cells, and an external voltage is applied to the fuel cells to produce a reducing atmosphere at the anodes by electrolysis.
2. Method in accordance with Claim 1, characterized by the fact that, in addition to the water vapor, CO₂ is supplied to the anodes through the fuel gas inlet (3).
3. Method in accordance with Claim 1 or Claim 2, characterized by the fact that, to effect immediate inerting of the anodes, mainly CO₂ is initially supplied, and that the amount of CO₂ that is supplied is then reduced with increasing supply of water vapor.
4. Fuel cell system, especially a high-temperature fuel cell system, with one or more fuel cells (2), each of which has an anode and a cathode, and with an anode inlet (3) for supplying an anode gas to the anodes, characterized by the fact that a water vapor generator (6) is provided for supplying the anodes with water vapor to inert the anodes, and that the anodes can be connected with an external voltage source (7) to produce a reducing atmosphere at the anodes.
5. Fuel cell system in accordance with Claim 4, characterized by the fact that, in addition to the water vapor, CO₂ can be supplied to the anodes through the fuel gas inlet (3).
6. Fuel cell system in accordance with Claim 4 or Claim 5, characterized by the fact that, to effect immediate inerting of the anodes, mainly CO₂ can be initially supplied to the anodes, and that the amount of CO₂ that is supplied is then reduced with increasing supply of water vapor.

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7. Fuel cell system in accordance with Claim 4, Claim 5, or Claim 6, characterized by the fact that the water vapor generator (6) is connected with the anode inlet (3) for supplying the water vapor to the anodes.

8. Fuel cell system in accordance with any of Claims 4 to 7, characterized by the fact that the water vapor generator (6) contains a catalyst.

9. Fuel cell system in accordance with any of Claims 4 to 8, characterized by the fact that the water vapor generator (6) simultaneously serves to produce the CO₂ additionally supplied to the anodes.